Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 4: Advanced

PE 0603627A / Smoke, Obscurant and Target Defeating Sys-Adv Dev

Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	2.430	-	-	-	-	-	-	-	-	-	2.430
E79: SMOKE/OBSCURANT SYSTEM	-	2.430	-	-	-	-	-	-	-	-	-	2.430

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

#### Note

Change Summary Explanation: Funding - FY 13: Funds realigned to higher priority Army programs.

### A. Mission Description and Budget Item Justification

Project supports Screening Obscuration Module (SOM) in the development and improvement of an array of obscurant agents, and devices to improve survivability of the combined armed forces, support extended range capability, complement combined weapon systems, and enhance force effectiveness and combat power.SOM will be man portable with plug and play technology to facilitate quick mounting and dismounted. This program element supports critical management studies, operational assessments, testing, prototyping, and analyses that are conducted on a continuing basis. To ensure that Technology Development efforts are targeted against the emerging threat. US Forces must be able to effectively neutralize and degrade energy weapon systems and electro-optical systems/smart weapons that operate in the full range of the electromagnetic spectrum. Improvements are sought across the entire multi-spectral range from visual through infrared (IR) and millimeter wavelengths (MMW) radar for incorporation into self-protection using generated and launched smoke systems.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	<b>FY 2015 Base</b>	FY 2015 OCO	FY 2015 Total
Previous President's Budget	2.725	-	-	-	-
Current President's Budget	2.430	-	-	-	-
Total Adjustments	-0.295	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments 1	-0.295	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army											Date: March 2014				
Appropriation/Budget Activity 2040 / 4					PE 060362	am Elemen 27A / Smoke feating Sys-	e, Obscurar		et (Number/Name) SMOKE/OBSCURANT SYSTEM						
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost			
E79: SMOKE/OBSCURANT SYSTEM	-	2.430	-	-	-	-	-	-	-	-	-	2.430			
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-					

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

#### Note

Not applicable for this item.

### A. Mission Description and Budget Item Justification

Project supports Screening Obscuration Module (SOM) in the development and improvement of an array of obscurant agents, and devices to improve survivability of the combined armed forces, support extended range capability, complement combined weapon systems, and enhance force effectiveness and combat power.SOM will be man portable with plug and play technology to facilitate quick mounting and dismounted. This program element supports critical management studies, operational assessments, testing, prototyping, and analyses that are conducted on a continuing basis. To ensure that Technology Development efforts are targeted against the emerging threat. US Forces must be able to effectively neutralize and degrade energy weapon systems and electro-optical systems/smart weapons that operate in the full range of the electromagnetic spectrum. Improvements are sought across the entire multi-spectral range from visual through infrared (IR) and millimeter wavelengths (MMW) radar for incorporation into self-protection using generated and launched smoke systems.

Title: SOM Development  1.659  Articles:  Description: SOM Development	-	-
	-	-
Description: SOM Development		
	i	
FY 2013 Accomplishments:		
SOM Development		
Title: Test and Evaluation of SOM systems 0.151	-	-
Articles: -	-	-
Description: Test and Evaluation of SOM systems		
FY 2013 Accomplishments:		
Test and Evaluation of SOM systems.		
Title: SOM Engineering and Modeling 0.620	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 4	,	,	umber/Name) DKE/OBSCURANT SYSTEM

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Articles:	-	-	-
Description: Project Management			
FY 2013 Accomplishments: Project Management			
Accomplishments/Planned Programs Subtotals	2.430	-	-

# C. Other Program Funding Summary (\$ in Millions)

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	<b>Base</b>	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	<b>Total Cost</b>
• SMOKE/OBSCURANT SYSTEM:	-	-	-	-	-	-	-	-	-	-	-
Project 200 Smoke, Obscurant and											
Target Defeating Sys - Eng Dev											
<ul> <li>Target Defeating System: Project</li> </ul>	-	-	-	-	-	-	-	-	-	-	-
198 Smoke, Obscurant and											
Target Defeating Svs - Eng Dev											

#### Remarks

# D. Acquisition Strategy

Acquisition Strategy: Development of SOM systems to include design, construction, modeling and testing of prototypes.

SOM acquisition strategy is to develop a small smoke generator that degrades the visual through near infrared portion of the Electro-Magnetic Spectrum. SOM program will focus on replacing current smoke pots to provide the Joint Land Forces with a medium area screening obscuration device. The initial increment, Increment 1, will focus on developing a SOM system capable of obscuring the Visual through Near IR wavelengths of the electromagnetic spectrum. Future SOM Increments 2 and 3 will incorporate bi-spectral and multi-spectral effects. The SOM has the capability to quickly produce (less than 30 seconds) medium duration (12 minutes), medium area (204 meters length x 12 meters height) screening obscuration effects, screening an area equivalent to three times the size of a large combat vehicle. The individual Soldier or team will employ the SOM devices on open and complex terrain; excluding enclosed areas. SOM will be deployed to accomplish the following mission types: avoid observation, defense of a battle position, and assault position.

# **E. Performance Metrics**

N/A

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Exhibit R-3, RDT&E I	Project C	ost Analysis: PB 2	015 Army	/		,						Date:	March 20	)14	
Appropriation/Budge 2040 / 4	et Activity	1				PE 060		Smoke, O	lumber/N bscurant Dev		(Number	,	NT SYST	ЕМ	
Management Service	es (\$ in M	illions)		FY 2	013	FY 2	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Project Management Personnel	MIPR	JPM : NBCCA	5.010	0.620		-		-		-		-	Continuing	Continuin	g Continuin
		Subtotal	5.010	0.620		-		-		-		-	-	-	-
Product Developmen	nt (\$ in M	illions)		FY 2	013	FY 2	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
SOM Hardware Development	C/CPFF	JPM NBCCA, APG MD : Edgewood. MD	20.355	1.196		-		-		-		-	Continuing	Continuin	Continuin
		Subtotal	20.355	1.196		-		-		-		-	-	-	-
Support (\$ in Million	s)			FY 2	013	FY 2	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Engineering Modeling and Studies SOM	MIPR	Edgewood Chemical Biological Center : Edgewood, Md	0.000	0.463		-		-		-		-	Continuing	Continuin	g Continuin
		Subtotal	0.000	0.463		-		-		-		-	-	-	-
Test and Evaluation	(\$ in Milli	ons)		FY 2	013	FY 2	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
SOM Test & Evaluation	MIPR	OGA Various : Various	1.241	0.151		-		-		-		-	Continuing	Continuin	Continuin
		Subtotal	1.241	0.151		-		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2	015 Army						Date:	March 20	14	
Appropriation/Budget Activity 2040 / 4			R-1 Program E PE 0603627A / Target Defeating	ct (Numbe SMOKE/O	er/Name) OBSCURANT SYSTEM					
	Prior Years	FY 2013	FY 2014	FY 2015 Base		2015 CO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	26.606	2.430	-	-	-		-	-	-	-

xhibit R-4, RDT&E Schedule Profile: P	B 2015 Army						-									Dat	e: Ma	arch	201	14		
ppropriation/Budget Activity 040 / 4					R-1 Program Element (Number/Name) PE 0603627A / Smoke, Obscurant and Target Defeating Sys-Adv Dev  Project (Number/Name) E79 / SMOR								(Number/Name) MOKE/OBSCURANT SYSTEM									
	FY 2013 FY 201			014	14 FY 2015 FY 2016					F	FY 2017			FY 2018			FY 2019					
	1	2 3	4 1	2	3 4	1	2 3	4	1	2 3	4	1	2	3 4	1	1 2	3	4	1	2	3	4
SOM Schedule																						
MS B Preparation																						

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603627A / Smoke, Obscurant and Target Defeating Sys-Adv Dev	-,	umber/Name) DKE/OBSCURANT SYSTEM

# Schedule Details

	Sta	End			
Events	Quarter	Year	Quarter	Year	
SOM Schedule	2	2010	4	2014	
MS B Preparation	1	2013	4	2014	